

What Is Claimed Is:

1. A control apparatus for starting application software on a computer, comprising:
- 5 an application start portion for starting one or more specified applications;
- an application registration portion for registering information relating to started applications as one group;
- an application start information storage portion for
- 10 storing information for starting a registered application; and
- an application group start portion for searching the application start information storage portion based on an entered symbol and starting one or more corresponding applications.
- 15 2. The control apparatus for starting application software on a computer according to Claim 1, further comprising:
- a symbol receiving portion for receiving a symbol that has been specified arbitrarily by a user;
- a conversion portion for converting the received symbol
- 20 into location information indicating resources on the computer that have been previously associated with the symbol; and
- a designation portion that designates locations to applications using this location information;
- wherein the application start information storage portion
- 25 is searched by designation of the designation portion.
3. The control apparatus for starting application software on a computer according to Claim 2, wherein the symbol is entered via a clipboard.
- 80 4. The control apparatus for starting application software on a computer according to Claim 2, further comprising:
- a buffer; and

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a character conversion portion, which, when receiving characters entered by a user with a key input device and temporarily holding the characters in the buffer, transfers the characters held in the buffer to a specified application while carrying out a conversion if necessary and not carrying out a conversion if not necessary;

wherein the symbol is entered via the buffer of the conversion portion.

10 5. The control apparatus for starting application software on a computer according to Claim 1, wherein, when a file is dragged and dropped, the application registration portion obtains at least a full path of the dropped file, a full path of the application to be started, and option switches that may have
15 to be specified when passing data to the application to be started and starting the application.

6. The control apparatus for starting application software on a computer according to Claim 1,

20 wherein the application group start portion comprises a window handle obtaining portion, which obtains a process ID of a started application, observes whether a window having this process ID has appeared, and, when such a window has appeared, obtains a window handle of that window; and

25 wherein the window of that application is controlled on the basis of the window handle.

7. The control apparatus for starting application software on a computer according to Claim 1,

30 wherein the application group start portion comprises a second window handle obtaining portion, which enumerates and stores all windows on the desktop before starting an application, enumerates all windows on the desktop after starting an

application, and, when, comparing the two, the number of windows has increased, obtains the window handles of the started windows, regarding the added windows as the started windows; and

wherein the windows of those applications are controlled on the basis of the window handles.

8. A control method for starting application software on a computer, comprising:

an application start step for starting one or more specified applications;

an application registration step of registering information relating to started applications as one group;

an application start information storage step of storing information for starting a registered application; and

an application group start step of searching application start information that has been stored based on an entered symbol and starting one or more corresponding applications.

9. A control method for starting application software on a computer, comprising:

a step of activating a control portion and displaying a control sub-screen and an application start screen;

a step of starting an application software in a window of the control portion and displaying an application screen of a predetermined size, and displaying an application sub-screen in the control sub-screen;

a step of, when a user has set the size and/or the position of the application screen, modifying the size and/or the position of the application sub-screen in response thereto;

a step of giving a name to an application group composed of one or more applications that are displayed in the entire display range and registering that application group;

a step of entering the name to call up a corresponding

application group;

a step of starting applications, taking the information that has been read out as parameters; and

a step of displaying windows of the applications.

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10. The control method for starting application software on a computer according to Claim 9, wherein the control sub-screen is a screen for visualizing the position of application windows in the display range corresponding to an entire screen displayed
10 by a display device.

11. The control method for starting application software on a computer according to Claim 9, further comprising a step of modifying the size and/or the position of the application screen
15 performed in response when the user has changed the size and/or the position of the application sub-screen.

12. The control method for starting application software on a computer according to Claim 9, wherein the step of calling
20 up a corresponding application group reads at least one of the group consisting of the type of application corresponding to the name, the file to be opened by that application, the position and the size of a window of the application, and information relating to links to other applications.

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13. The control method for starting application software on a computer according to Claim 9, further comprising a step in which the control portion obtains window information including the window handle of the application screen so as to associate
30 the application screen and the application sub-screen.

14. The control method for starting application software on a computer according to Claim 13, wherein the step of obtaining

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window information comprises:

a step of obtaining a process ID of a started application
when an application software has been started;

a step of observing all windows opened in all screens;

5 a step of determining whether a window with said process
ID has appeared; and

a step of obtaining the window handle of that window when
the window with said process ID has appeared.

10 15. The control method for starting application software on
a computer according to Claim 14, wherein processing of the step
of determining whether a window with said process ID has appeared
is interrupted when said window has not appeared after a
predetermined time.

15 16. The control method for starting application software on
a computer according to Claim 13, wherein the step of obtaining
window information comprises:

a step of storing all windows in all screens before starting

20 an application software;

a step of enumerating all windows in all screens after
starting an application software;

a step of determining whether the number of windows has
increased;

25 a step of regarding added windows as started windows; and

a step of obtaining the window handles of those windows.

17. The control method for starting application software on
a computer according to Claim 13, wherein the step of obtaining
30 window information comprises:

a step of obtaining a process ID of a started application
when an application software has been started;

a step of observing all windows opened in all screens;

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a step of determining whether a window with said process ID has appeared;

a step of obtaining the window handle of that window when the window with said process ID has appeared.

5 a step of terminating the process when the window handle could be obtained in the preceding step;

a step of storing all windows in all screens before starting an application software;

10 a step of enumerating all windows in all screens after starting an application software;

a step of determining whether the number of windows has increased;

a step of regarding added windows as started windows; and

a step of obtaining the window handles of those windows.

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18. The control method for starting application software on a computer according to Claim 13, wherein the step of entering a name to call up a corresponding application group comprises:

20 a step of receiving a symbol, which has been arbitrarily specified by the user in a selected application, from a computer memory area that can be used for sending data from an application that has been arbitrarily selected by the user to a destination outside this application; and

25 a step of converting a received symbol into location information indicating the location on the computer that has been associated with the received symbol, and designating a location to the application using this location information.

19. A medium for storing a program to have a computer execute:

30 an application start step for starting one or more specified applications;

an application registration step for registering information relating to started applications as one group;

an application start information storage step storing information for starting a registered application; and

an application group start step for searching application start information that has been stored based on an entered symbol
5 and starting one or more corresponding applications.

20. A multi-monitor computer comprising:

a processing portion;

a graphics memory for a plurality of screens that is
10 controlled by the processing portion;

a plurality of display portions for displaying content of the graphics memory;

a control screen display portion for displaying a control screen;

15 an application start portion for starting one or more specified applications;

an application registration portion for registering information relating to started applications as one group;

an application start information storage portion for
20 storing information for starting a registered application; and

an application group start portion for searching the application start information storage portion based on an entered symbol and starting one or more corresponding applications; and

25 an application display portion for displaying started applications;

wherein the control screen display portion displays the control screen on one display portion; and

wherein the application display portion displays the started applications on the other display portions.

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21. The multi-monitor computer according to Claim 20,

wherein the display portion on which the control screen is displayed is a small display device for operation; and

wherein the display portion for displaying applications is a large display device for presentation.

22. A client-server system comprising a plurality of
5 clients and a server,

wherein the server comprises:

an application start portion for starting one or more specified applications;

an application registration portion for registering
10 information relating to started applications as one group;

an application start information storage portion storing information for starting a registered application; and

an application group start portion for searching
the application start information storage portion based on an
15 entered symbol and starting one or more corresponding applications; and

wherein the clients send symbols to the server, and request data of started applications.